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EXAMINER
PUENTE, EMERSON C

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte HANS F. VAN RIETSCHOTE, MAHESH P. SAPTARSHI, and
CRAIG W. HOBBS

———————

Appeal 2008-4317
Application 10/669,931
Technology Center 2100

———————

Decided[1]: March 17, 2009

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Before JOHN C. MARTIN, ALLEN R. MACDONALD, and
STEPHEN C. SIU, *Administrative Patent Judges.*

SIU, *Administrative Patent Judge.*

DECISION ON APPEAL

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[1] The two month time period for filing an appeal or commencing a civil
action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date
shown on this page of the decision. The time period does not run from the
Mail Date (paper delivery) or Notification Date (electronic delivery).

STATEMENT OF THE CASE

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-8, 10-25, 27-34, and 36-41. Claims 9, 26, and 35 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

The Invention

The disclosed invention relates generally to failing over an application being executed by a first node to a second node (Spec. 2). Specifically, when failover of an application executing on the first node is detected, a second node in the network is provisioned to execute the application previously executed on the first node (*id.*).

Independent claim 1 is illustrative:

1.   A method comprising:

detecting that an application in a first node is to failover, wherein the first node is included in a cluster being used to execute the application;

adding a second node to the cluster responsive to the detecting;

provisioning the second node to execute the application responsive to the detecting; and

failing the application over from the first node to the second node.

The References

The Examiner relies upon the following references as evidence in support of the rejections:

Vert	US 6,360,331 B2	Mar. 19, 2002
Harper	US 6,629,266 B1	Sep. 30, 2003 (filed Nov. 17, 1999)
Mashayekhi	US 6,922,791 B2	Jul. 26, 2005 (filed Aug. 9, 2001)
Dinker	US 6,944,788 B2	Sep. 13, 2005

The Rejections

1. The Examiner rejects claims 16 and 17 under 35 U.S.C. § 102(e) as being anticipated by Harper.

2. The Examiner rejects claims 1-4, 8, 10-13, 19-22, 25, 27-34, and 36-41 under 35 U.S.C. § 103(a) as being unpatentable over Vert and Mashayekhi.

3. The Examiner rejects claims 5, 6, 14, 15, 18, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Vert, Mashayekhi, and Dinker.

4. The Examiner rejects claims 7 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Vert, Mashayekhi, Dinker, and Harper.

ISSUE #1

The Examiner finds that "[t]he term 'provisioning' is defined in Webster's Dictionary as 'the act or process of providing'" and concludes

that "Harper discloses providing the secondary computer to run the application upon a failure to the primary" (Ans. 16).

Appellants assert that "the dictionary definition of the VERB provision . . . is 'to supply with provisions'" and "<u>providing the secondary computer that already is supplied with the provisions . . . is not the same as provisioning the second computer to execute the application</u>" (Reply Br. 2).

Did Appellants demonstrate that the Examiner erred in finding that Harper discloses provisioning a second node to execute the application responsive to the detecting as recited in claim 16?

FINDINGS OF FACT

The following Findings of Facts (FF) are shown by a preponderance of the evidence.

1. Harper discloses "if the fail-to-node can accept failover workload" (col. 8, ll. 11-12), then "shut[ting] down the application on the primary node and . . . restart[ing] the application on the secondary node [in the cluster]" (col. 8, ll. 15-17).

2. Mashayekhi discloses that "[c]lustering . . . refers to a group of individual computer systems, or nodes, operating together as if it were a single system or single computer resource" (col. 1, ll. 12-14).

3. Mashayekhi discloses including a "passive node" "in the cluster exclusively for the purpose of being the failover node for all active nodes in the cluster" (col. 2, ll. 61-64).

4. Vert discloses crating a cluster in which "a system administrator runs a cluster installation utility on a system that then becomes a first member of the cluster 58" (col. 4, ll. 63-65) (bolding omitted).

5. Dinker discloses that "one or more of the other application server computers may be designated as 'backup' application server computers" (col. 8, ll. 30-33).

PRINCIPLES OF LAW

Obviousness

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

ANALYSIS (ISSUE #1)

While the Examiner finds that Harper discloses shutting down the execution of a workload on a primary node in a cluster and restarting the execution of the workload on a secondary node in the cluster if the secondary node "can accept failover workload" (FF 1), the Examiner has not demonstrated that Harper also discloses provisioning the secondary node to execute the application responsive to detecting that the primary node is to failover.

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Harper discloses one embodiment in which the secondary node in the cluster is provisioned to execute an application and when the primary node is to failover, the provisioned secondary node restarts the application. In this embodiment, the secondary node is previously "provisioned" to execute the application. Because the secondary node in this embodiment is already capable of executing the application prior to detecting that the primary node is to failover, we disagree with the Examiner that Harper discloses provisioning of the secondary node responsive to detecting a first node is to failover as recited in claim 16 since the provisioning step of Harper cannot be responsive to an action (i.e., detecting) that has not yet occurred. Also, restarting of the application on the secondary node in response to detecting that the primary node is to failover does not constitute "provisioning" of the secondary node.

In another embodiment of Harper, a primary node is to failover but the secondary node cannot accept the failover workload. In this scenario, "an urgent message is sent to the system management subsystem that adequate redundancy (e.g., resources) does not exist to support fault tolerance requirements" (col. 8, ll. 3-6). The Examiner has not demonstrated that sending an "urgent message" alerting a management subsystem of the lack of resources is equivalent to provisioning a secondary node in a cluster to execute the application. Indeed, it appears that no such provisioning takes place at all in this embodiment.

Accordingly, we conclude that Appellants have met their burden of showing that the Examiner erred in rejecting independent claim 16, and claim 17 which depends therefrom.

ISSUE #2

Appellants assert that while Mashayekhi discloses a "cluster" that has "four nodes, three of which are active and one of which is passive" (App. Br. 7), Mashayekhi fails to disclose or suggest "provisioning the second node to execute the application responsive to the detecting" (*id.* at 8).

The Examiner finds that "provisioning" means "the act or process of providing" and "Mashayekhi discloses providing the secondary computer to run the application upon a failure to the primary (see column 2, lines 60-61 and 66-67)" (Ans. 18).

Did Appellants demonstrate that the Examiner erred in finding that Mashayekhi discloses or suggests detecting that an application in a first node is to failover and provisioning the second node to execute the application responsive to the detecting?

ANALYSIS (ISSUE #2)

Claim 1 recites "provisioning the second node to execute the application responsive to the detecting" (Claim Appendix 19), claim 19 recites "provision the second node to execute the application responsive to detecting" (*id.* at 22), and claim 31 recites "a third node is configured to be

provisioned to execute the application" which is "in response to a detection that the application is to failover from the first node" (*id.* at 23).

While we agree with the Examiner that Mashayekhi discloses "providing" a computer that is already provisioned to execute an application, the Examiner has not demonstrated that Mashayekhi also discloses or suggests the step of provisioning the second computer to execute the application. Even assuming that the second computer must have been provisioned to execute the application based on the fact that the second computer executes the application in Mashayekhi, the Examiner has not demonstrated that such a "provisioning" is performed responsive to the detecting step. Thus, even assuming that the provisioning step must have been performed in Mashayekhi, it appears that the step of provisioning must have been performed prior to detecting, if at all, and cannot therefore have been performed responsive to the detecting.

In addition, the Examiner has not demonstrated that either Vert or Dinker discloses or suggests the provisioning step as recited in claims 1, 19, and 31.

Accordingly, we conclude that Appellants have met their burden of showing that the Examiner erred in rejecting independent claims 1, 19, and 31, and claims 2-8, 10-15, 18, 20-25, 27-34, and 36-41 which depend therefrom.

CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that Appellants have demonstrated that the Examiner erred in finding that Harper, Mashayekhi, Vert, or Dinker, alone or in combination, discloses or suggests provisioning a node to execute the application responsive to detecting that the application in another node is to failover (issues #1 and #2).

DECISION

We reverse the Examiner's decision rejecting claims 16 and 17 under 35 U.S.C. § 102(e) and claims 1-8, 10-15, 18-25, 27-34, and 36-41 under 35 U.S.C. § 103(a).

REVERSED

msc

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